

transceiver associated therewith, and the master-control unit including a second pulse position modulated transceiver associated therewith.

The remote-control system/master-control unit of the present invention has pulse position modulated transceivers in both the remote-control unit and the master-control unit which permits bi-directional transmission of control signals and data through a single transceiver at each site. Such a system enables a user to communicate bi-directionally with the spa from anywhere in or near the home so as to both control necessary operating functions and obtain status information regarding operating parameters. Neither of the prior art references discloses a remote-control/master-control unit for a pool or spa wherein both units have a PPM transceiver. The Examiner correctly points out that Hatcher simply discloses a remote-control system for a spa which is one directional wherein the remote-control simply is a transmitter and the control unit simply has a receiver. Neither the remote-control nor the master-control unit has a PPM transceiver as recited in the claims. To correct the deficiencies of Hatcher, the Examiner has cited Wang et al. which discloses a pulse position modulation based transceiver architecture. Wang et al. simply discloses a specific PPM transceiver capable for use in the wireless communications arena using the IR spectrum. Nowhere does Wang teach or suggest that this PPM transceiver is suitable for a remote-control/master-control system for a pool or spa wherein the PPM transmitter will be positioned in both the remote-control and the master-control unit.

2 It is respectfully submitted that it is with impermissible hindsight that the Examiner is combining the references in order to reject the claims of the current application. It is well settled law that for two references to be properly combinable, there must be some teaching or suggestion from the references themselves in order to justify the rejection. It is respectfully submitted that there is

no teaching or suggestion to combine the references, and on the contrary is respectfully submitted that the references teach away from such a combination. Hatcher specifically indicates that the remote-control system for the spa was designed to prevent a user of the spa from having to get out of the spa in order to operate various components of the spa. The system was developed to allow the operator to control the spa while in the water and is made to be able to float. Once in the spa there would be no need to have bi-directional communication because the user knows whether the pump is circulating the water or whether the lights are on, and therefore would not need status information sent to the remote-control.

The current invention provides for a remote-control system for bi-directional communication because the user typically is in the house and cannot tell the status of the spa such as whether the spa is on or off or the temperature of the water. Consequently being able to communicate bi-directionally is an advantage not taught by Hatcher.

Claim 9 recites all of the elements of claim 1 plus additional elements and therefore is allowable for at least the reasons recited with respect to claim 1.

Claim 11 is a method of communicating control information from a distance to a control and monitor unit and obtaining status information from a distance from a control and monitor unit comprising the steps of transmitting from a remote-control unit to the master-control unit at least one pulse position modulated radio-wave signal command concerning an operating function of the pool or spa, sending from the remote unit to the master-control unit at least one pulse position modulated radio-wave signal requesting that status information concerning operating parameters of the pool or spa be sent from the master-control unit to the remote-control unit, and reading status information displayed by the remote-control unit and received from the master-control unit in response to the request signal of the sending step. Again it is respectfully submitted that the recited

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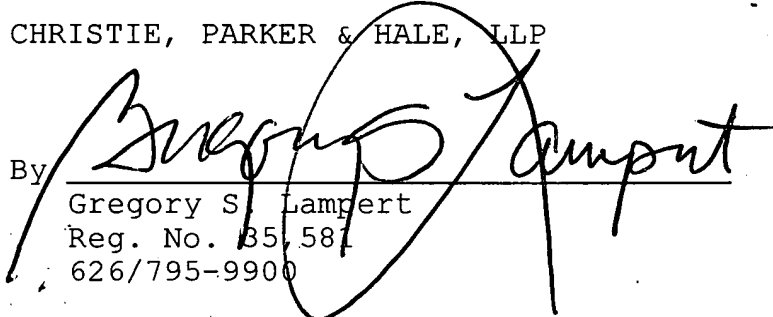
method is not obvious in light of the Examiner's obviousness combination of Hatcher, Wang and Thompkins et al. .Thompkins et al. simply discloses a spa control system having a display. Thompkins et al. also does not disclose bi-directional communication through PPM transceivers.

In view of foregoing remarks, it is respectfully submitted that the application is in now in condition for allowance and, accordingly, early indication thereof is respectfully requested.

Respectfully submitted,

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